

# UA 523 Advanced Computer Networks

<b>Course Code:</b>	UA 523
<b>UTAA Credit (Theoretical-Laboratory hours/week):</b>	3(3-0)
<b>ECTS Credit:</b>	6.0
<b>Department:</b>	Unmanned and Autonomous System Engineering
<b>Language of Instruction:</b>	English
<b>Level of Study:</b>	Graduate
<b>Offered Semester:</b>	Fall and Spring Semesters.

## Course Objectives

The course aims to introduce the fundamentals of computer networks, including theory of networking, network design, data transmission, packet communication and internetworking along with development of new hardware and software for computer networks

## Course Content

Introduction to computer networks, the physical layer, the data link layer, the medium access control sublayer, the network layer, the transport layer, the application layer, network security

## Course Learning Outcomes

- 1- evaluation of the computer networks and explain how modern network works
- 2- and implement local area and wide area computer networks
- 3-Apply various techniques in designing networks protocol software
- 4-Develop software for internetwork communication
- 5-Monitor and evaluate the network performance in various circumstances